

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated August 23, 2006 has been received and its contents carefully reviewed.

Claims 5, 18 and 21 are hereby amended. Claim 23 is newly added. No new matter is added. Claim 20 is cancelled. Accordingly, claims 1-19, 21, 22 and 23 are pending. Claims 1-4 are withdrawn from consideration. Accordingly, claims 5-19, 21, 22 and 23 are examined. Reexamination and reconsideration of the examined claims are respectfully requested.

In the Office Action, claims 5-7 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2002/0071065 to Lee (hereinafter "Lee") in view of U.S. Publication No. 2001/0030718 to Yoo et al. (hereinafter "Yoo"). Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of Yoo and in further view of U.S. Patent No. 5,510,918 to Matsunaga et al. (hereinafter "Matsunaga"). Claims 10, 11, 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of Yoo and in further view of U.S. Patent Publication No. 2001/0035527 to Tanaka et al. (hereinafter "Tanaka"). Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of Yoo and Tanaka, and further in view of U.S. Patent No. 5,135,608 to Okutani (hereinafter "Okutani"). Claims 15 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of Yoo and Tanaka, and further in view of U.S. Patent No. 6,621,537 to Nakamura et al. (hereinafter "Nakamura"). Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of Yoo and in further view of U.S. Patent No. 6,169,592 to Choi (hereinafter "Choi"). Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka in view of U.S. Patent No. 6,001,539 to Lyu et al. (hereinafter "Lyu"). Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka in view of Lyu and in further view of Okutani. Claims 20-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka in view of Lyu and in further view of Nakamura.

The rejection of claims 5-7 and 9 as being unpatentable over Lee in view of Yoo is respectfully traversed and reconsideration is requested.

Claim 5 is allowable over Lee in view of Yoo in that claim 5 recites a combination of elements including, for example “forming a data pad terminal directly contacting an upper surface of the data pad.” See, for example, Fig. 4 of the present invention. None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. Applicant agrees with the Examiner’s statement on page 3 of the last Office Action that Lee fails to disclose forming a data pad terminal contacting the data pad.

Applicant respectfully submits Yoo fails to cure the deficiencies of Lee. Yoo does not disclose that the data pad terminal “directly” contacts “an upper surface of the data pad.” See, for example, Fig. 6D. Because the cited references fail to teach or suggest the features of claim 5, Applicant respectfully submits that claim 5 and claims 6, 7 and 9, which depend therefrom, are allowable over Lee in view of Yoo.

The rejection of claim 8 as being unpatentable over Lee in view of Yoo and in further view of Matsunaga is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Matsunaga fails to cure the aforementioned defects associated with the teachings of Lee in view of Yoo. None of the cited references, singly or in combination, teaches or suggests “forming a data pad terminal directly contacting an upper surface of the data pad,” as recited in independent claim 5. For at least this reason, claim 8, which depends from claim 5, is allowable over the cited references.

The rejection of claims 10, 11, 13 and 14 as being unpatentable over Lee in view of Yoo and in further view of Tanaka is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Tanaka fails to cure the aforementioned defects associated with the teachings of Lee in view of Yoo. None of the cited references, singly or in combination, teaches or suggests “forming a data pad terminal directly contacting an upper surface of the data pad,” as recited in independent claim 5. For at least this reason, claims 10, 11, 13 and 14, which depend from claim 5, are allowable over the cited references.

The rejection of claim 12 as being unpatentable over Lee in view of Yoo and Tanaka, and further in view of Okutani is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Okutani fails to cure the aforementioned defects associated with the combined teachings of Lee in view of Yoo and Tanaka. None of the cited references, singly or in combination, teaches or suggests “forming a data pad terminal directly contacting an upper surface of the data pad,” as recited in independent claim 5. For at least these reasons, claim 12, which depends from claim 5, is allowable over the cited references.

The rejection of claims 15 and 16 as being unpatentable over Lee in view of Yoo and Tanaka, and further in view of Nakamura is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Nakamura fails to cure the aforementioned defects associated with the combined teachings of Lee in view of Yoo and Tanaka. None of the cited references, singly or in combination, teaches or suggests “forming a data pad terminal directly contacting an upper surface of the data pad,” as recited in independent claim 5. For at least these reasons, claims 15 and 16, which depends from claim 5, are allowable over the cited references.

The rejection of claim 17 as being unpatentable over Lee in view of Yoo and in further view of Choi is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Choi fails to cure the aforementioned defects associated with the teachings of Lee in view of Yoo. None of the cited references, singly or in combination, teaches or suggests “forming a data pad terminal directly contacting an upper surface of the data pad,” as recited in independent claim 5. For at least this reason, claim 17, which depends from claim 5, is allowable over the cited references.

The rejection of claim 18 as being unpatentable over Tanaka in view of Lyu is respectfully traversed and reconsideration is requested.

Claim 18 is allowable over Tanaka in that claim 18 recites a combination of elements including, for example “the ohmic contact layer is etched by a dry etching process in a chamber”

and “a photoresist used in the formation of the ohmic contact layer is removed by a dry strip method using dry gases in the chamber.” Tanaka does not teach at least these features of the claimed invention. In contrast, Tanaka is completely silent with respect to the “dry etching process” of “the ohmic contact layer” and the “dry strip method” of the “photoresist used in the formation of the ohmic contact layer” being carried out in the same “chamber.” Furthermore, there is no suggestion in Tanaka that the processes can occur in the same “chamber.” Therefore, Tanaka does not teach or suggest “the ohmic contact layer is etched by a dry etching process in a chamber” and “a photoresist used in the formation of the ohmic contact layer is removed by a dry strip method using dry gases in the chamber,” as recited in independent claim 18. The Examiner relies on Lyu to teach etching the ohmic contact layer and removing the photoresist in the same chamber.

Applicant respectfully submits Lyu fails to cure the aforementioned defects associated with the teachings of Tanaka. Lyu merely discloses etching an organic passivation layer and removing a photoresist in one etching chamber. See column 5, lines 45-65. Thus, Lyu does not teach etching an “ohmic contact layer” and removing “a photoresist used in the formation of the ohmic contact layer” in the same chamber. Furthermore, for at least the reason that the ohmic contact layer 133 in Lyu is not made of the same material as the organic passivation layer, Lyu does not suggest the claimed limitations. See column 4, lines 37-55.

Furthermore, claim 18 is allowable over the cited references in that claim 18 recites “wherein an upper surface of the ohmic contact layer is etched after the dry strip method.” Tanaka does not teach at least these features of the claimed invention. This limitation was previously recited in claim 20 which is now cancelled. Applicant agrees with the Examiner’s statement that Tanaka does not disclose the ohmic contact layer as etched. Furthermore, Lyu does not teach “wherein an upper surface of the ohmic contact layer is etched after the dry strip method.”

The Examiner relies on Nakamura to disclose the features of claim 20, now cancelled. Applicant respectfully submits that Nakamura fails to cure the aforementioned defects associated with the teachings of Tanaka in view of Lyu. Nakamura only discloses the thickness of the

ohmic contact layer is set to be in the range of approximately 20 nm to 70 nm. See column 8, lines 59-60. Nakamura also discloses etching the semiconductor active film and ohmic contact film through dry etching. See column 9, lines 1-2. However, Nakamura is completely silent with respect to the feature "an upper surface of the ohmic contact layer is etched after the dry strip method." Thus, one of ordinary skill in the art would not be motivated to modify Tanaka or Lyu with the teachings of Nakamura. Accordingly, because the cited references fail to teach or suggest the features of claim 18, Applicant respectfully submits that claim 18 is allowable over the cited references.

The rejection of claim 19 as being unpatentable over Tanaka in view of Lyu and in further view of Okutani is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Okutani fails to cure the aforementioned defects associated with the teachings of Tanaka, Lyu and Nakamura. None of the cited references, singly or in combination, teaches or suggests "wherein an upper surface of the ohmic contact layer is etched after the dry strip method," as recited in independent claim 18. For at least this reason, claim 19, which depends from claim 18, is allowable over the cited references.

The rejection of claims 20-22 as being unpatentable over Tanaka in view of Lyu and in further view of Nakamura is respectfully traversed and reconsideration is requested.

The features of claim 20 are herein incorporated into claim 18 and claim 20 is herein cancelled. Accordingly, the rejection of claim 20 is moot. Also, claims 21 and 22 now depend on claim 18. As discussed above, the cited references fail to teach or suggest the limitations of independent claim 18. For at least this reason, claims 21-22, which depend from claim 18, are allowable over the cited references.

New claim 23 has been added to recite a liquid crystal display device including a data pad terminal directly contacting a data pad and contacting and extending below a seal pattern located between two substrates. Support for this claim can be found in at least Figure 4 of the present application. Applicant respectfully asserts that this claim distinguishes over the cited references and is therefore allowable over the cited references.

Applicants believe the foregoing amendments and remarks place the application in condition for allowance and early, favorable action is respectfully solicited.

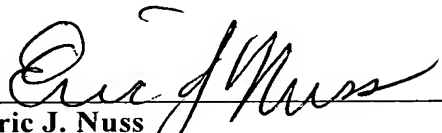
If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. *A duplicate copy of this sheet is enclosed.*

Respectfully submitted,

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By


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